

**What is claimed is:**

**[Claim 1]** 1. A device capable of detecting vibration and shock, the device comprising:

a laser diode capable of transmitting a laser beam; and  
a vibration/shock detector capable of detecting vibration or shock;  
wherein the laser diode and the vibration/shock detector are formed on one chip.

**[Claim 2]** 2. The device of claim 1 wherein the vibration/shock detector comprises floating comb-finger electrodes.

**[Claim 3]** 3. A device capable of detecting vibration and shock, the device comprising:

a photo detector for receiving a reflected laser beam; and  
a vibration/shock detector capable of detecting vibration or shock;  
wherein the photo detector and the vibration/shock detector are formed on one chip.

**[Claim 4]** 4. The device of claim 3 wherein the vibration/shock detector comprises floating comb-fingers electrodes.

**[Claim 5]** 5. A pick-up head capable of detecting vibration and shock, the pick-up head comprising:

a chip; and  
a vibration/shock detector formed on the chip, capable of detecting vibration or shock received by an optical disk drive.

**[Claim 6]** 6. The pick-up head of claim 5 wherein the vibration/shock detector comprises floating comb-finger electrodes.

